

Note: Four possible answers A, B, C. and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- e-mail is abbreviation of:

- (a) Emergency mail (b) Electronic mail ✓
- (c) Urgent mail (d) None of these

2- In which process, sun gains energy:

- (a) Nuclear fission (b) Nuclear fusion ✓
- (c) Burning of gases (d) Chemical reaction

3- The equation of Not Operation is:

- (a) $X = A \cdot B$ (b) $X = A + B$
- (c) $X = A - B$ (d) $X = \bar{A}$ ✓

4- Frequency is equal to:

- (a) $f = \frac{1}{T}$ ✓ (b) $f = \frac{l}{g}$
- (c) $f = 2\pi \sqrt{\frac{l}{g}}$ (d) $f = kx$

5- The refractive index of ice is:

- (a) 1.00 (b) 1.33
- (c) 1.31 ✓ (d) 2.42

6- The unit of electric intensity is:

- (a) Watt (b) Ns^{-1}
- (c) NC^{-1} ✓ (d) Nm

7- Transformer is used for:

- (a) Increase voltage ✓ (b) Increase resistance
- (c) Both a & b (d) None of these

8- One mega byte is equal to:

(a) 1024 kB ✓ (b) 1035 kB
(c) 1044 kB (d) 1054 kB

9- The spring's constant is:

(a) $k = \frac{-F}{x}$ ✓ (b) $F = ma$
(c) $w = mg$ (d) $k = -\frac{x}{m}$

10- Mathematical form of current is:

(a) $I = \frac{t}{Q}$ (b) $I = \frac{Q}{t}$ ✓
(c) $I = QR$ (d) $I = VR$

11- The electroroscope is an instrument which is used for:

(a) Detecting charge ✓ (b) Detecting current
(c) Detecting radiations (d) None of these

12- The speed of sound in air at 0°C is:

(a) 317 ms^{-1} (b) 346 ms^{-1}
(c) 386 ms^{-1} (d) 331 ms^{-1} ✓